

REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments and remarks herewith. The present amendment is being made to facilitate prosecution of the application.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1-8 are pending. Claims 1 and 6-8, which are independent, are hereby amended. Support for this amendment is provided throughout the Specification as originally filed, and specifically at page 29. No new matter has been introduced by this amendment. Changes to the claims are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicant is entitled.

II. OBVIOUSNESS-TYPE DOUBLE PATENTING REJECTIONS

Claims 1-8 were rejected on the ground of non-statutory obviousness-type double patenting as allegedly unpatentable over the claims of U.S. Patent No. 6,901,010 to Iwahashi et al. in view of U.S. Patent No. 5,778,342 to Erell et al. (hereinafter, merely "Erell").

Applicant respectfully submits that the pending claims are distinct from Iwahashi and Erell, thereby obviating the obviousness-type double-patenting rejections.

III. REJECTIONS UNDER 35 U.S.C. §103(a)

Claims 1-8 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 6,188,982 to Chiang (hereinafter, merely "Chiang") in view of Erell and further in view of U.S. Patent No. 6,839,670 to Stammmler et al. (hereinafter, merely "Stammmler").

As understood by Applicant, Chiang relates to a system for adaptively generating a composite noisy speech model to process speech in, e.g., a non-stationary environment, which comprises a speech recognizer, a re-estimation circuit, a combiner circuit, a classifier circuit, and a discrimination circuit. In particular, the speech recognizer generates frames of current input utterances based on received speech data and determines which of the generated frames are aligned with noisy states to produce a current noise model. The re-estimation circuit re-estimates the produced current noise model by interpolating the number of frames in the current noise model with parameters from a previous noise model. The combiner circuit combines the parameters of the current noise model with model parameters of a corresponding current clean speech model to generate model parameters of a composite noisy speech model. The classifier circuit determines a discrimination function by generating a weighted PMC HMM model.

As understood by Applicant, Erell relates to a pattern recognition system and method that includes the steps of a) providing a noisy test feature set of the input signal, a plurality of reference feature sets of reference templates produced in a quiet environment, and a background noise feature set of background noise present in the input signal, b) producing adapted reference templates from the test feature set, the background noise feature set and the reference feature sets and c) determining match scores defining the match between each of the adapted reference templates and the test feature set.

As understood by Applicant, Stammler relates to a speech dialog system for automatic control of devices based on speech input.

Applicant respectfully submits that the present claims are patentable over the cited references for at least the following reasons.

A. Cited references fail to meet all claim limitations

Claim 1 recites, *inter alia*:

“...wherein the generating means measures a variation of correct speech recognition rate during a time period between activation of the activation means and the beginning of speech...” (Emphasis added)

Applicant respectfully submits that nothing has been found in Chiang or Erell or Stammler that would teach or suggest the above-identified feature of claim 1. Specifically, neither Chiang nor Erell, nor Stammler, taken alone or in combination, teach or suggest measuring a variation of correct speech recognition rate during a time period between activation of the activation means and the beginning of speech, as recited in claim 1.

B. Office Action has failed to establish a *prima facie* case for obviousness

Applicant reiterates the arguments made previously that none of the cited references, either alone or in combination, teach, suggest or motivate a skilled artisan to practice the instant invention. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation to modify the reference or to combine reference teachings either in the references themselves or in the general knowledge available to one of ordinary skill in the art; second, there must be a reasonable expectation of success; third, the prior art reference or references must teach or suggest all the claim limitations. M.P.E.P. §

2143. It is, however, impermissible for the Office Action to use hindsight based on an Applicant's disclosure to determine that an Applicant's claimed invention is obvious in view of the cited art. M.P.E.P. § 2142. The motivation or teaching to make the claimed combination by modifying or combining prior art references must be found in the prior art and not in the Applicant's disclosure. *In re Vaeck*, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

Applicant submits that the references cited by, and combined by, the Office Action actually teach away from the instant invention. The Office Action has countered that the cited references do not teach away from their combination and that Erell provides a motivation to combine the reference teachings. However, in coming to this conclusion, it is respectfully submitted that the Office Action has ignored the first two elements of substantiating a rejection under 35 U.S.C. § 103(a), namely (1) "to provide some suggestion of the desirability of doing what the inventor has done," and (2) demonstrating that "there must be a reasonable expectation of success." MPEP § 706.02(j) (emphasis added). Because of these deficiencies in the rejection, Applicant respectfully requests the withdrawal of the §103 rejections.

Claim 1 recites, *inter alia*:

"... generating means for generating said model that corresponds to such a state that said data do not exist, on the basis of the noise that has been input at the time just preceding the inputting of said data, and for updating that which is corresponding to it and is stored in said storing means."
(Emphasis added.)

The Office Action has admitted that, "Chiang does not disclose extracting noise from input just preceding the input of speech data." The Office Action then suggests that, because Erell does allegedly contain such a teaching, it would have been obvious to one of skill in the art to combine the teachings of Chiang and Erell. The Office Action further argues that

Erell provides a motivation to combine Chiang with Errell. It is respectfully submitted that such a combination would not have been obvious to one of skill in the art.

Indeed, Chiang expressly teaches away from the suggested combination. Column 4, lines 2-5 of Chiang state that “[t]he advantages of this on-line PMC method over the conventional PMC method lies mainly in its avoidance of the need to collect the background noise in advance.” Thus, in this single sentence, Chiang teaches that it would be undesirable to have to collect background noise in advance of other pattern recognizing steps, as recited in the claims of the instant application.

Accordingly, because the two of the “basic criteria” of obviousness have not been, and cannot be established, the Office Action has failed to present a *prima facie* case of obviousness. Further, it is respectfully submitted that because Chiang specifically teaches away from the combination applied by the Office Action, such a combination cannot be the basis of a rejection under 35 U.S.C § 103(a).

Therefore, for at least these reasons, independent claim 1 is patentable.

Independent claims 6-8 are similar, or somewhat similar, in scope and are therefore patentable for similar, or somewhat similar, reasons.

IV. DEPENDENT CLAIMS

The other claims in this application are each dependent from one of the independent claims discussed above and are therefore patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

CONCLUSION

In the event the Examiner disagrees with any of statements appearing above with respect to the disclosure in the cited references, it is respectfully requested that the Examiner specifically indicate those portions of the references providing the basis for a contrary view.

Please charge any additional fees that may be needed, and credit any overpayment, to our Deposit Account No. 50-0320.

Applicant respectfully submits that all of the claims are in condition for allowance and requests early passage to issue of the present application.

Respectfully submitted,

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